

ABSTRACT OF THE DISCLOSURE

Methods for esterifying hydroxyl groups in cellulose, hemicellulose, and lignin in wood are described, wherein the wood is chosen from loblolly, slash, shortleaf, longleaf or radiata pines. Methods can include solvent drying techniques and heating provided by
5 electromagnetic radiation, such as microwave, and radiofrequency. Products made from the methods are described that have greater decay resistance and dimensional stability as compared with non-esterified wood products.